

PATENT

DOCKET NO.: CNXT-006-CIP

Conexant Ref.: 00CXT0295D-DID

Express Mail No.: EK916662797US

ABSTRACT

A method and apparatus for receiving radio frequency signals in a communication system is described. The inventive method and apparatus utilizes an inventive receiver circuit that downconverts an input signal so that interference components of the input signal can be easily removed at baseband. Specifically, the inventive receiver circuit operates by sub-sampling a first intermediate frequency signal in such a way that an unwanted signal is not aliased into a wanted signal, and can therefore be filtered therefrom after sub-sampling. Thus, the present invention allows the use of a relatively simple tuner, with a single downconversion stage, without imposing excessive requirements on the filtering in the tuner.

5

10